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|-------------------------------|------------------------|---------------------|--|
| <b>Notice of Allowability</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                               | 10/788,998             | SUTARDJA, PANTAS    |  |
|                               | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                               | Jean B. Corrielus      | 2611                |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 10/15/08.
2. ☒ The allowed claim(s) is/are 1-135, 137, 139-146, 148-150, renumbered as 1-49, 111, 112, 50-76, 84-86, 109-110, 87-108, 113-143, 146-147, 77-83, 144-145, respectively.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All   b) ☐ Some\*   c) ☐ None   of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_.

**Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |  |
|--|--|
| <ol style="list-style-type: none"> <li>1. <input type="checkbox"/> Notice of References Cited (PTO-892)</li> <li>2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br/>Paper No./Mail Date ____</li> <li>4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br/>of Biological Material</li> </ol> | <ol style="list-style-type: none"> <li>5. <input type="checkbox"/> Notice of Informal Patent Application</li> <li>6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),<br/>Paper No./Mail Date ____.</li> <li>7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment</li> <li>8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance</li> <li>9. <input type="checkbox"/> Other ____.</li> </ol> |
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/Jean B Corrielus/  
Primary Examiner, Art Unit 2611

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Jeffrey Chapp on 11/3/08.

The application has been amended as follows:

#### IN THE CLAIMS:

Claim 47, line 28, after "signals", --the-- has been inserted.

Claim 79, step g.), line 1, after "step (a.)", --via a gain controller-- has been inserted.

Claim 82, step e.), line 1, after "step (a.)", --via a gain controller-- has been inserted.

Claim 83, step e.), line 1, after "step (a.)", --via a gain controller-- has been inserted.

Claim 138 has been cancelled.

Claim 140 has been amended as follow:

--140. (Currently Amended) A [computer program stored on a] computer readable medium that stores a computer program, said computer program when executed by a processor, causes the processor to [for] control[ling] at least one of gain

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and timing phase of a communication system by performing [, wherein the computer program performs] the steps of:

a.) filtering an input signal to generate a first filtered signal in accordance with a first plurality of filter coefficients;

b.) updating the first plurality of filter coefficients according to a first least mean square (LMS) process;

c.) constraining at least one filter coefficient of the first plurality of filter coefficients;

d.) filtering the first filtered signal to generate a second filtered signal in accordance with a second plurality of filter coefficients,

wherein a number of filter coefficients of the second plurality of filter coefficients comprises one of less than and equal to a number of the filter coefficients of the first plurality of filter coefficients;

e.) generating a reconstruction filter output in response to the first filtered signal; and

f.) [outputting at least one of a gain control signal and a timing phase control signal] generating an error generator output in response to the second filtered signal and said reconstruction filter output;

g.) outputting at least one of a gain control signal and a timing phase control signal in response to the error generator output from step (f.).--

IN THE SPECIFICATION:

Paragraph 0080, line 8, "propagate" has been deleted; line 11, "propagation medium" has been deleted; line 13, "an electrical connection having one or more wires" has been deleted.

#### Examiner's Comment

2. The limitation "computer readable medium", as recited in the claim, is interpreted to exclude "signal", "transmission media", "carrier wave", "distribution media".

3. The following is an examiner's statement of reasons for allowance: a method and apparatus are disclosed. The closest prior art, Behrens et al, US patent No. 6,819,514, discloses similar method and apparatus. However, Behrens et al fails to teach or fairly suggest the limitations recited in claim 1, lines 25-44, claim 24, and lines 28-38.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean B. Corrielus whose telephone number is 571-272-3020. The examiner can normally be reached on Monday-Thursday from 9:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh Fan can be reached on 571-272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jean B Corrielus/  
Primary Examiner  
Art Unit 2611